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369. \*HASORA (Parata) CHROMUS, Cramer.

Sumba (*Doherty*). Recorded by Doherty as *Parata malayana*, Felder, which is said to be a synonym of *H. chromus*, Cramer.

370. HASORA (Parata) SIMPLICISSIMA, Mabille.

Bali, Sambawa? Sumba? (*Doherty*). Mr. Doherty says that a second species of "*Parata*" occurs both in Sambawa and Sumba which he did not identify. It is probably the present species.

371. BIBASIS SAMBAVANA, Elwes and Edwards.

B. sambavana, Elwes and Edwards, Trans. Zool. Soc. Lond., vol. xiv, p. 305, pl. xxvii, fig. 96, clasp of male (1897).

Sambawa (Doherty)

372. BADAMIA EXCLAMATIONIS, Fabricius. Bali, Sambawa, Sumba (Doherty).

373. RHOPALOCAMPTA SUBCAUDATA, Felder. Bali (Doherty).

On the manifestation of Social Instinct in the Common Babbler (Crateropus canorus).—By B. B. OSMASTON, Indian Forest Service. Communicated by the Natural History Secretary.

[Received November 25th; Read December 1st, 1897.]

The existence of a "moral sense" in animals is so often questioned that I feel bound, in justice to the birds, to put on record an account of a scene of which I was a witness, which seems to prove that in some kinds of birds at least social instituct at all events is present in a highly developed form.

In the summer of 1895 I caught and trained a young "Shikra," the Indian Sparrow Hawk, (Astur badius), to catch Mynahs and other small birds. One morning in August, while walking round my garden with the Shikra on my hand I saw a party of "seven sisters" (the Jungle Babbler, Crateropus canorus) feeding on the ground. At my approach they all flew up into a tree, and as I came still nearer they began to fly across one by one to another tree. I threw the Shikra up at one of them, which she succeeded in capturing after a short chase, bringing it down to the ground in her firm grip. The rest of the Babblers,

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however, hearing the cries of their captured "sister," came down to the rescue without the slightest show of hesitation, and in a shorter time than it takes to tell were engaged in a spirited attack on the Hawk, apparently using both beak and claws in their effort to make her relinquish her hold.

The result was unexpected, for before I could reach the spot the Shikra had let the Babbler go and had taken refuge in a neighbouring bush, whilst the "seven sisters" not improbably rather elated at the success of their plucky little affray, collected together in a mango tree and poured forth volumes of abuse at the head of their vanquished enemy.

Note.—Since writing the above I have many times flown a Shikra at *C. canorus* always with the same result, *viz.*, that so long as I kept out of the way the Babblers would attack the Hawk *en masse* and give her a real 'bad time.' I never let them actually rescue their 'sister.' as it would have been very demoralizing for the Hawk, but I have not the least doubt but that they would have succeeded in making it so warm for the Hawk that she would have been only too glad to let go and be off. More than once she had begun to utter her cries of alarm, preparatory to letting go, when I arrived on the scene and drove off the Babblers On one occasion I ran up quickly and actually caught a Babbler on the Hawk's back (the Hawk having another Babbler in her claws) holding on so firmly that I had the greatest difficulty in making it leave go ! I think therefore I have fairly proved now that Jerdon's attribution of cowardice to this species (Birds of India, vol. ii, pt. i, p. 62), is not always correct. B. B. O.



Notes on various species of Grebes, with especial reference to the power of walking and digestion possessed by these birds.—By F. FINN, B. A., F. Z. S., Deputy Superintendent of the Indian Museum.

[Received November 25th; Read December 1st, 1897.]

The remarkable birds forming the family *Podicipedidæ* of ornithologists have long possessed for me especial interest, and I venture herewith to record my observations on several of the species, which I have had the good fortune to study in captivity, and thus to observe under conditions which have, I hope, enabled me to set at rest some doubts concerning certain particulars in their economy.

I shall follow wherever possible the nomenclature and arrangement of Mr. H. E. Dresser, who in his Birds of Europe, Vol. VIII, has given excellent figures and accounts of most of the species with which I shall here have occasion to deal.

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